

# ISRCS ontrol Systems 2015

Hosted in Philadelphia, PA • August 18-20, 2015

## 8<sup>th</sup> International Symposium on Resilient Control Systems

The major purpose of this symposium is to extend and endorse particular concepts that will generate novel research and codify resilience in next generation communication system designs

**Statement of Themes:** Engineering systems are increasingly subjected to disturbances which are not generally predictable at design time. These disturbances can be man-made or naturally occurring, and they can be physical or cyber in nature. A multi-disciplinary approach for designing controls for these systems is envisioned that provides the intrinsic state awareness and intelligence that give the overall system an increased level of resilience.

### Submission Schedule

- Paper Submission Due: April 6, 2015
- Notification of Paper Acceptance: June 15, 2015
- Final Paper Submission: July 6, 2015

### Cost

- \$495
- \$445 for registration by July 12, 2015
- \$50 discount for IEEE IES members
- \$50 discount for HFES members
- Half price registration for registered students

### Venue/Accommodations

Hyatt Regency Philadelphia  
201 S Columbus Blvd, Philadelphia, PA 19106  
Tel: 215.928.1234 • Fax: 215.521.6543

[Reservations](#)

### Schedule

- Day 1: Special Topics Sessions
- Day 2: Paper Sessions
- Day 3: Panel and Breakouts

### Benefits

- Opportunity to participate in an evolving focus area within critical infrastructure protection and cyber-physical systems
- Reduced registration fee for IEEE IES members

### General Chairs

- Frank Ferrese, Naval Surface Warfare Center  
[Send Email](#)
- David Scheidt, Johns Hopkins Applied Physics Laboratory  
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### Organizing Chair

- Michelle Cozzi, Naval Surface Warfare Center  
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### Technical Program Chairs

- Li Bai, Temple University

### Call for Papers

Paper submission will be handled through the symposium website listed below. Please refer to this website for the latest information.

- Full Papers: limited to 6 double column pages in a font no smaller than 10-points per IEEE format guidance.
- Work-in-Progress and Industry practice: limited to 4 double column pages, in a font no smaller than 10-points per IEEE format guidance. Work-in-Progress papers comprise up to 4 double-column pages, describing research that has not yet produced the results required for a regular paper, but that due its novelty and potential impact deserves to be shared with the community at an early stage. Accepted papers and Work-in-Progress papers will be published in the conference proceedings.

### Topical Areas (including, but not limited to)

- Human Machine Interaction: cognitive modeling, machine learning, digital human modeling
- Human Systems Design: environmental configuration, tailored presentation
- Control Theory: intelligent, reconfigurable, optimal
- Control Framework: supervisory, multi-agent, distributed intelligence
- Sensor Architectures: embedded modeling and analysis, intelligence and agents, wireless control and determinism, multi-parameter integration and diversity
- Monitoring/Control Security: decoys, randomization, diversity, training and cognition, decision making, measurement
- Cyber Architecture: health indicators, defense optimization
- Data Fusion: data reduction, security characterization, data diversity, anomaly detection, response prioritization
- Computational Intelligence: machine learning, neural networks, fuzzy logic, evolutionary computation, Bayesian belief networks
- Cyber-physical power and energy systems: real-time communication, protection, control, resilience, reliability, sustainability, efficiency
- Robotic systems: Failure/error tolerance and recovery, adaptable/flexible architectures, multi-level/agent systems, multi-sensor fusion, tele-presence, probabilistic behaviors, performance validation/verification, communications security
- Cyber-physical system security
- Cyber security for industrial control systems

### Keynote Speakers

- Paul Stockton, Sonecon, LLC

<http://resilienceweek2015.inl.gov/ControlSystems/>

A panoramic view of the Philadelphia skyline at dusk, featuring prominent skyscrapers like the Comcast Center and the Liberty Bell Tower. The sky is a mix of soft orange and blue.

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